DEQ EXHIBIT E

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MONTANA BOARD OF ENVIRONMENTAL REVIEW

IN THE MATTER OF:

**APPEAL AMENDMENT AM4
WESTERN ENERGY COMPANY
ROSEBUD STRIP MINE AREA B,
PERMIT NO. C1984003B**

Case No.: BER 2016-03 SM

AFFIDAVIT OF ERIC URBAN IN SUPPORT OF DEQ'S BRIEF IN OPPOSITION TO PETITIONERS' MOTION FOR SUMMARY JUDGMENT

I, Eric Urban, swear (or affirm) under oath that:

1. I am of majority age;

2. I graduated from The University of Montana in 2000 with a Bachelor's of Science in Wildlife Biology, and worked as wildlife biologist for various organizations, including the United States Forest Service and Oregon Department of Fish and Wildlife, for three years prior to working for DEQ;

3. I am currently the Bureau Chief for the Water Quality Planning Bureau ("Water Quality Bureau") at the Montana Department of Environmental Quality ("DEQ") and have been employed in that position for 1.5 years;

4. The Water Quality Bureau is responsible for developing and implementing

Montana's surface and groundwater quality standards; monitoring and assessing surface water quality conditions in the state; developing total maximum daily load ("TMDL") restoration plans for Montana surface waters; identifying impaired streams, lakes and rivers; and managing all data and information systems related to the Montana Water Quality Act;

5. I have been employed by DEQ since 2003, and have held various professional positions within DEQ, including Section Supervisor of the Water Quality Standards Program; Technical Coordinator/Wildlife Biologist of the DEQ Coal Section of the Industrial and Energy Minerals Bureau; Section Supervisor of the Technical Section and Water/Wastewater Certification Program Section of the Public Water Supply Bureau; and Water Quality Specialist within the Monitoring and Assessment Program of the Water Quality Bureau;

6. When I worked in the Monitoring and Assessment Program for DEQ, one of my duties was to develop Water Quality Attainment Records ("Attainment Record(s)") for the Water Quality Bureau;

7. Attainment Records are developed by the DEQ Water Quality Bureau as a mechanism for determining whether a stream is meeting its designated uses;

8. If it is determined from the available water quality data that impairment of a stream is caused by particular pollutants, then all potential sources of the pollutants located in the watershed are identified by Water Quality Bureau staff and noted in the Attainment Record;

9. However, the sources of the pollutants are commonly not "confirmed". In other words, the term "unconfirmed source" as used in the Attainment Records, is really a

"potential source". It does not mean that it is an actual source of the identified pollutants that are causing the "impairment";

10. Likewise, the "cause" of the "impairment" is determined based on available water quality data for a specific parameter such as specific conductance ("SC"), total dissolved solids ("TDS") or nitrogen. If a "cause" of impairment is identified with "low confidence" that generally means that the data used to make that causation determination was either outdated or insufficient to make a more definitive determination with respect to causation;

11. Just because the Attainment Record identifies nitrogen as a "cause" of the impairment of a particular designated use, it does not mean that nitrogen is "actually" causing impairment. Nitrogen is a cause with a low level of confidence means that the assessor had a low level of confidence in the data used to support that determination;

12. The Water Quality Bureau uses the information contained in the Attainment Records to identify streams that require a TMDL to be developed. TMDL's are developed by DEQ for streams that are identified as "impaired" for a particular designated use and a particular pollutant;

13. When a TMDL is developed for a particular stream, the actual cause (pollutant) and source of the impairment is more precisely determined for that segment of stream and the sources of the pollution and the relative contribution of the source for a given pollutant is determined at that time;

14. TMDL's have not yet been developed for the upper or lower segment of EFAC;

15. In 2006, my former colleague, Mike Stermitz, developed the Attainment Records for EFAC, segment MT42K002_110 (headwaters to Colstrip) ("lower EFAC") and

segment MT42K002_170 (Colstrip to mouth) ("upper EFAC") (collectively "EFAC Attainment Records");

16. The EFAC Attainment Records have not been updated since 2006, although they are republished every two years. Accordingly, the information in the 2014 EFAC Attainment Records was eight years old when they were republished;

17. The Attainment Record for lower EFAC , which is a 32.36 mile segment of EFAC located downstream of mining and north of the town of Colstrip, indicates that this segment of the stream is "impaired" for the aquatic life designated use;

18. SC and TDS are identified with "low confidence" as a cause of the impairment of aquatic life, and coal mining and transfer of water from an outside watershed are identified as an "unconfirmed source" of the SC and TDS in the Attainment Record for lower EFAC. It does not mean that coal mining is the actual source of the SC and TDS. It means that Mike Stermitz identified coal mining as a potential source of the SC and TDS;

19. Historically, Attainment Records, including the Attainment Record for lower EFAC, group salinity/TDS/chlorides together as a single cause of impairment. This does not mean that there was an issue with chloride specifically, it simply represented a category for "salts";

20. For example, on page 17 of the Attainment Record for lower EFAC, there is a statement that says "[s]alinity/TDS/chlorides will remain a cause of impairment." This statement was made under the 2006 language, which lumps salinity/TDS/chlorides as a single cause;

21. However, on page 20 of the same record, chlorides are not listed as a cause of impairment. The language used on page 20 identifies causes by individual pollutants.

Salinity and TDS are identified separately as causes of impairment, but chlorides are not identified as a cause of impairment. This language is more precise than the narrative summary provided on page 17;

22. Therefore, the Attainment Record for lower EFAC does not identify chlorides as a cause of impairment;

23. The Attainment Record for upper EFAC, which is 24.67 segment of EFAC that is located upstream of the town of Colstrip, indicates that the stream is "ephemeral";

24. The process for assessing the health of an ephemeral stream in 2006 was to rely solely on the condition of the streamside habitat. According to the assessment record Mr. Stermitz identified mining as an "unconfirmed source" of the "alteration in stream-side or littoral vegetative covers" that was listed as a "cause" of impairment of aquatic life in upper EFAC;

25. This information was based solely on a personal conversation he had with a mine employee, who indicated that the mine had cut through the stream channel in one spot. This information could not be verified through site visits or aerial photographs;

26. As explained above, just because "alteration in stream-side or littoral vegetative covers" is listed as a cause of the impairment with "medium confidence". The level of confidence that Mr. Stermitz placed on this decision was listed as "medium," which was simply a qualitative indication of his confidence in the data/information used for the decision. Likewise, just because surface mining is listed as an "unconfirmed source" of the alteration of stream-side vegetative covers, it does not mean that it is actually the source;

27. It should be noted, that no aquatic life survey was done in 2005-2006 for upper EFAC, because this segment of stream is ephemeral and was predominantly dry at the time

the Attainment Record was developed. Therefore, it was not feasible to collect water samples or aquatic life samples at that time. Only habitat could be analyzed as a result;

28. Additionally, it should be noted that physical habitat is only one of the factors typically considered by the Water Quality Bureau in making an impairment determination. The other two factors that are considered are chemistry and biology;

29. In Eastern Montana, the Water Quality Bureau has found that stream habitat and water chemistry is highly variable, which results in a highly variable biological community due to the harsh conditions of the natural environment;

30. Accordingly, just because an aquatic life survey indicates that a stream segment contains less than desirable macroinvertebrate communities, that does not mean that the cause of this condition is man-made and or that the stream is impaired as a result;

31. In 2014, the DEQ coal program requested that Intervenor hire a consultant to conduct an updated aquatic life survey of EFAC;

32. Prior to conducting the survey, Intervenor's consultant, Penny Hunter from Arcadis, consulted with Dave Feldman, former Macroinvertebrate Specialist with the Water Quality Bureau, who provided Intervenor's consultant with a copy of DEQ's sampling methodology (WQPBWQM-009 (2012)) for how to collect macroinvertebrate samples in different habitats in Montana;

33. At the request of DEQ Coal Program staff, Dave Feldman advised Penny Hunter how to collect samples, but was instructed not to advise her how the sample results could be used to determine aquatic life health;

34. Because of the high variability of the natural system, the DEQ Water Quality Bureau does not believe that the health of aquatic life in eastern Montana streams can be

determined by the composition of a macroinvertebrate sample alone;

35. The 2014 aquatic life survey conducted by Intervenors' consultant was used by DEQ Coal Program staff to make a material damage determination with respect to the impact of the proposed operations of AM4 on the beneficial use of aquatic life support. It was not used by the DEQ Water Quality Bureau staff in making an impairment determination for aquatic life in EFAC;

36. For this reason, Intervenors' consultant was not required to follow DEQ standard operating procedures ("SOPs") for making stream segment impairment determinations.

FURTHER AFFIANT SAYETH NOT.

DATED this 20th day of July, 2016.

MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

By:_____
ERIC URBAN
Bureau Chief, Water Quality Planning

Subscribed and sworn to (or affirmed) before me this 20th day of July, 2016, by ERIC URBAN.

_____
NAME
NOTARY PUBLIC for the State of Montana
Residing in Lewis and Clark County.
My Commission Expires: May 19, 2019

(SEAL)

HILLARY HOULE NOTARIAL SEAL STATE OF MONTANA

HILLARY HOULE
NOTARY PUBLIC for the
State of Montana
Residing at Helena, Montana
My Commission Expires
May 19, 2019